

1                    FIGS. 4A, 4B, 4C, 5A, 5B and 5C show embodiments of the second  
2 configuration option where the loop forming device (e.g., 144 146 148) is outside the handle  
3 and the elongated element is comprised of a first cord 140, a loop 142 and a loop forming  
4 device. The first cord is attached to the loop 142 (or second cord) using a loop forming device  
5 (e.g., means).

6                    FIG. 4A shows an embodiment where the elongated element is comprised of  
7 two or more cords. The loop forming device is comprised of cord couplers 144 146, 148. The  
8 cord 140 can be called a trunk cord. The unit has a loop 142 formed of a second cord. Additional  
9 loops can be attached to the trunk cord 140 using any suitable means, such as a hoop.

10                    FIG. 4B shows another embodiment where the loop forming device is  
11 comprised of a snaphook 152 and hoops 158 160 162. Knots 163 and 164 form the hoops 158  
12 160 163 in the cords. FIG. 4B shows a first loop 154 and a second loop 156 attached to a first  
13 (trunk) cord 150. The handle 10 is attached to the trunk cord 150. The loop 154 is preferably  
14 1/8 inch nylon rope with an outer casing of plastic beads and a rubber portion at the bottom of  
15 the loop. The second loop 156 is preferably 1/8 inch nylon rope with an outer casing of plastic  
16 beads.

17                    FIG. 4C shows another embodiment of the invention. FIG. 4C shows the loop  
18 forming device comprised of a detachable hoop 166. A first loop 168 and an optional second  
19 elongated element 170 are attached to the first cord 164. Knots 165 form hoops on the ends of  
20 the cords. Any loop forming devices could be used to form the loop and attach to or connect to  
21 other loops or elements. The loop 168 is preferably 1/8 inch nylon rope with an outer casing of  
22 plastic beads and a rubber portion at the bottom of the loop. The optional second elongated  
23 element 170 is preferably 1/8 inch nylon rope with an outer casing of plastic beads and a rubber  
24 portion at the bottom.

25                    FIG. 5A shows an embodiment of the invention where the loop forming  
26 device is comprised of an annular element 174. The annular shaped piece 174 has holes that  
27 accept and attach to a portion of the elongated element. The elongated element can be comprised  
28 of one of more cords. FIG. 5A shows a first cord 172 and second cord 176 with first and second  
29 ends 177 178 that can form a loop. The second cord ends can have knots to attach to the annular  
30 element 174.

1 FIG. 5B shows an embodiment of the invention where the loop forming  
2 device is comprised of an annular element 174. The annular element 174 has holes that accept  
3 and attach to a portion of the elongated element. FIG. 5B shows the elongated first element  
4 comprised of one cord 180. The cord has knots 182 and 184 that attach the cord 180 to the  
5 annular element 174.

6 FIG. 5C shows an embodiment of the invention where the loop forming  
7 device is comprised of an annular element 188. FIG. 5C shows the elongated element comprised  
8 of three cords 190, 192 and 194. The trunk cord 190 is attached to the handle 10 and the ring 188  
9 preferably using a knot 189. The first and second loops 192 194 are attached to the ring 188.  
10 The first loop 192 is attached to the ring 188 by knots 196. The second loop 194 is attached to  
11 the ring 188 by a detachable hoop 195. The first and second loops 192 194 can be attached to the  
12 ring 188 using any suitable connection device.

### 13 **Third Configuration Option - Embodiments with loop forming device inside the** 14 **handle**

15 In a third configuration option (see e.g. FIGS. 9C and 6A), the loop forming  
16 device is inside the handle. FIGS. 6A, 6B, 6C, 7A, 7B, 7C, 7D show embodiments where the  
17 loop forming device is inside the handle (10). As shown in FIG. 6A, the loop forming device is  
18 inside the handle 10. Also see FIG. 6B for a cross sectional view of the handle and loop forming  
19 device in FIG. 6A. See FIG. 6C for another embodiment of the loop forming device in the  
20 handle. In these embodiments, each unit comprises: a handle 10 for gripping the unit; a first cord  
21 having a first and a second end; the first cord attached to the handle to form a first loop.

22 FIG. 6A shows an embodiment of the invention where the loop forming  
23 device is located inside the handle 10. FIG. 6A shows that two portions of the cord 198 are  
24 attached to the handle thereby forming a loop.

25 FIG. 6B shows a cross sectional view of that handle where the loop forming  
26 device is inside handle 10. FIG. 6B shows the loop forming device comprised of a cord coupler  
27 204. The cord coupler is preferably comprised of lipped or flanged metal. The handle also has  
28 an optional ball bearing 206 or washer, not shown, around the two cord portions 210 and 208. A  
29 soft outer shell 16 such as foam rubber can cover portions of the handle 10. The handle 10 can

1 be comprised of a first (upper) piece 200 that can have an external thread and a second (lower)  
2 piece 202 that can have an internal thread that can be screwed together.

3 FIG. 6C shows another cross sectional view of the handle 10 (200 202) where  
4 a washer 214 has two holes through which two cord portions pass. The cord portions can be  
5 secured by a cord coupler 216 or any suitable device. The washer provides an unexpected  
6 superior connection that allows the cords to rotate and provides a superior simulation of rope  
7 jumping.

8 FIG. 6D shows another embodiment where two loops 218 220 are attached to  
9 the handle using attachment means shown in FIG. 5B or Fig 5C. The loops could be formed from  
10 one or more cords. For example, loop 218 could be formed from one cord and loop 220 could be  
11 formed from another cord. The loops 220 218 could be formed by any suitable loop forming  
12 device. FIG. 6D shows metal cord couplers 222.

13 FIG. 7A shows yet another embodiment similar to that shown in FIG. 6A.  
14 FIG. 7A shows an important embodiment of the invention where the loop forming device is  
15 preferably located inside the handle 10. FIG. 7A shows that two portions 208 210 of the cord 198  
16 are attached to the handle thereby forming a loop. In an alternative embodiment, the two cord  
17 portions could pass entirely through the handle 10 and be attached to the handle on the outside  
18 end of the handle.

19 FIG. 7A shows tubular elements 224 around a portion of the elongated  
20 element 198. In this embodiment, the elongated element 198 is preferably 1/8 inch nylon rope.  
21 The tubular elements 224 provide an outer casing. The tubular elements are preferably comprised  
22 of beads or plastic beads. The tubular elements 224 can provide weight or air resistance and  
23 protection to the user. These tubular elements allow the weight and wind resistance of the units  
24 to be adjusted. FIG. 7A shows a soft cushion element 226 covering a portion of the cord 198,  
25 preferably at the bottom of the loop. The soft cushion element 226 can be one piece or many  
26 pieces.

27 FIG. 7B shows a cross sectional view of that handle where the loop forming  
28 device is inside the handle 10. FIG. 7B shows the loop forming device comprised of a knot 230.  
29 The handle also has a washer 232 around the two cord portions 210 and 208. A soft outer shell  
30 16 such as foam rubber can cover portions of the handle 10. The handle 10 can be comprised of